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The purpose of this report is to identify the various aspects of language laboratory operation and maintenance as they relate to the teacher and the administrator, and to suggest certain practices which will result in more effective utilization of the installation. Discussion of the language laboratory includes: (1) selection of personnel, (2) scheduling, (3) budgeting, (4) mechanical operation and staff training, and (5) preventive maintenance. A sample form for scheduling the use of the laboratory and a sample laboratory service contract are included. (RL)



Focus Reports on the Teaching of Foreign Languages

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1972



MAINTENANCE OF THE LANGUAGE LABORATORY

by Frank W. Medley

Since the mid 1950's, when ideas and attitudes began changing with respect to the priorities of foreign language instruction, the language laboratory has become an integral part of the facilities of most school districts. The laboratory is used by a number of teachers in their continuing instruction, and as a result the problem of assigning responsibility for the maintenance of the facility arises. The purpose of this paper is to identify the various aspects of language laboratory operation and maintenance as they relate to the teacher and the administrator, and to suggest certain practices which will result in the more effective utilization of the installation.

There is no doubt that the major responsibility for successful language laboratory maintenance belongs to the teaching staff or the language laboratory director where one is employed. In most instances, the lab is a fact of life for the average foreign language teacher and, as such, imposes a professional obligation upon him. His primary maintenance responsibilities are (1) to be familiar with all of the operational procedures involved in the use of the lab, and (2) to bring mechanical problems to the attention of the person directly in charge of the facility, or, in the absence of a lab director, to assume occasionally the responsibility of initiating necessary requests. However, the building administrator has a key role also; he and the teacher/lab director must work together in several areas. In fact, the teacher is as dependent upon the administrator in many matters as the administrator is upon the teacher for actual operation of the lab, and this mutual dependence necessitates much communication and reciprocal confidence. Most of the administrative responsibility is in seeing (1) that a qualified, dependable individual is in charge of the language laboratory; (2) that he has time to function in this capacity; and (3) that he is not bound by excessive "red tape" when performing his duties as language laboratory director.

SELECTION OF PERSONNEL

In selecting a language laboratory director, it is important to remember that in all probability the primary responsibility of the individual is to teach; therefore, his academic qualifications should receive top priority. During the interview, however, the following questions should be considered:

- 1. Has the candidate had any course work involving language laboratory equipment (foreign language methods classes), tape recorders (audio-visual courses), etc.?
- 2. Has the candidate worked in a language lab while in undergraduate school?
- 3. Has the candidate previously taught in a school which had a strong language laboratory program?



- 4. Has the candidate attended any institutes or workshops dealing with language laboratories?
- 5. Has the candidate had any in-service training, or perhaps training acquired while in the military, which is related to electronic communications?

Too often this type of information is not included on an application because the applicant feels that it is unimportant. Fortunately, many graduating foreign language teachers have had training in language laboratory operation and are quite competent.

If selection of the lab director is to be made from among a group of people who are already employees of the district, it is advisable to see if any of these have been assuming the responsibilities unofficially. If none have, perhaps one would agree to take a course in summer school which would better qualify him for the job. Basically, the need is for a teacher who is familiar with the operational procedures of the equipment and who is not terrified of machinery, rather than for an electronics technician.

It should also be pointed out that most language lab manufacturers provide orientation sessions when they install a new lab, and any teacher could sufficiently master the equipment during that orientation to function as an interim director until such time as a more experienced individual is employed. The National Association of Language Laboratory Directors offers a placement service to teachers and schools throughout the nation. Through this organization, a school district can search for the combination of teacher-lab director best suited to the job, and perhaps have a higher degree of effective staff utilization as a result.

Regardless of the procedure used to select and employ an individual for the position, dependability is essential. Most administrators already have more to do than they can accomplish in the "normal" eight to five day. They cannot check out the language lab equipment each time the teacher reports a malfunction, but neither can the district afford to spend money for needless service calls. The administrator cannot inventory the holdings each time tapes are ordered, but neither can he afford to let them be stockpiled. The administrator must be able to put complete trust in the person in charge of the lab, and that person must recognize this trust and discharge his responsibilities accordingly.

SCHEDULING

Once the teacher who is to be designated as the one in charge of the lab has been hired or selected, scheduling changes should be considered so that he will have sufficient time to perform his functions. Many administrators do not realize how much actual time must be spent in the direction and operation of a lab. A teacher can either teach a full load and neglect the directive aspect of the language lab, or that same teacher can teach a partial load (usually about four-fifths) and conduct an effective language laboratory program. Often, this is not taken into consideration when class assignments are made, and, as a result, some schools fail to realize optimum usage of their facilities. It is normally the administrator who is in a position to determine the

teaching assignments of the staff members, thereby determining to a great degree the overall effectiveness of the lab program.

In a situation where, for one reason or another, a teacher cannot have his load adjusted as has been suggested, an alternative must be found. In this case, the administrator generally expects the teacher to discharge the responsibilities of language lab director at some time other than during the student contact day, probably after school and/or on Saturdays. The salary of the teacher should be adjusted accordingly, generally by increasing it in proportion to the amount of time worked. This increment should assure the administration of the teacher's conscientiousness, since the task no longer has the aura of an "extracurricular" activity, as is often the case when no remuneration is involved.

Scheduling is also important as it relates to the use of the lab by the teachers in the department. There are several problems unique to foreign language instruction which need to be taken into consideration. For example, the administrator should consult the lab director before scheduling classes to make certain that he does not assign more students to the language classroom than there are positions in the lab. This is one administrative error which can create a completely irreconcilable situation for the language teacher, and which will last an entire semester or year. Also, when the administrator makes room assignments, he should keep in mind the problems of confusion and noise if two classes are cycled into the lab during one class period. All foreign language classrooms should be grouped together and quite near the language lab.

The teachers, on the other hand, should handle the mechanics of which teacher is to go to the lab on what day, at what time, etc. This generally is a rather simple task. One procedure would be as follows: (See Appendix A)

- Step 1: Prepare a chart with cells representing the daily schedule of the school.
- Step 2: On a separate sheet, list all the teachers who teach during each period.
- Step 3: Delete any teacher who does not use the lab on a regular basis, such as a Classics teacher.
- Step 4: On a rotating basis, schedule the teachers into the cells so that in a given period of time each teacher has the same amount of lab time. This may necessitate a two-week cycle rather than a one-week cycle.
- Step 5: Distribute copies of the schedule to all teachers in the department, taking care to explain it, particularly to those teachers new to the department.

This schedule will provide a certain amount of flexibility, since teachers can check with each other to see if the lab will be occupied as scheduled during any period.

It might be well to point out that the students should generally spend no more than twenty-five minutes in the lab at one time.



3

BUDGETING

Another area of concern in the proper maintenance of a language lab is the budget. Most school systems must operate on rather limited funds. However, the person in charge of the lab should be the one who makes decisions about repair, the technical specifications of the tapes and equipment which are to be purchased, and many other items related to the language lab. There should be a definite delegation of authority in this respect, with the person in charge of the lab making the decisions about when, what, and where to buy, and the business manager or other appropriate administrator giving a simple "yes" or "no" on the basis of availability of funds.

Both the lab director and the administrator should know at all times what funds are available for use by the language lab. For this reason, a specific Foreign Language Laboratory Budget is highly recommended. Such funds should be incorporated into the overall school or district budget in such a way as to permit them to remain apart from all other budget categories, such as Foreign Language Budget, High School Budget, or Audiovisual Budget. This also permits the allocation of funds for repair, which in turn allows the lab director to request technical assistance immediately upon needing it rather than waiting to see if funds are available for such service. This is the obvious answer for those school districts that prefer not to enter into a language laboratory service contract with an electronics firm for an extended period of time. Such a contract, however, is most highly recommended. (See Appendix B.)

In determining the total dollar amount to be in the budget, the district should anticipate spending about 1% of the total cost of the installation for annual maintenance, with the cost increasing about 1% each year. This will probably begin in the second or third year of operation and continue as long as the lab is in use. (First year — no expense; second year — 1%; third year — 2%; etc.) This should peak out at 10%, although normally one would not expect to have a constant 10% per year expense each year after the eleventh year. Once the annual 10% is budgeted, it does provide a good basis for developing a long-range plan of renovation or expansion of the facility.

MECHANICAL OPERATION AND STAFF TRAINING

One of the keys to effective maintenance of the language lab is the ability of the staff to operate it. In those instances where the lab is several years old, the teachers probably know how to operate it quite well. If they do not, then it is the responsibility of the lab director to help them learn, utilizing the operating manual. They should know not only how to play a tape for the students, but also what the lab is designed to do and how to make it perform in that manner. Proper training is one of the professional obligations that the lab director assumes. If operating manuals are not available in the school, the equipment manufacturer will usually send one upon request. Some companies will even send a representative to talk to the teachers. They are interested in having their equipment in working order, because this enables them to refer to the school as a "satisfied customer" and perhaps even refer prospective



customers to that school in the event that they want to talk to a teacher who is actually using the equipment.

In the case of a newly installed lab, the administrator should make certain that the contractor or manufacturer is not paid until all the currently employed teachers who will be using the lab have been effectively oriented. If the administration has employed a consultant prior to awarding the contract for construction of the lab, it is quite probable that the consultant will provide this service, along with many others. But regardless of whether it is the consultant or a representative of the manufacturer, the school should insist upon an effective orientation which involves actual manipulation of the new equipment rather than just a rapid demonstration. If possible, arrangements should be made for two orientation sessions, spaced so that the teachers will have an opportunity to use the lab for a few weeks between sessions and to determine those areas in which further training is required. It is the responsibility of the lab director to make certain that the staff knows how to use the lab, which, in the long run, will have a very decided effect on the preservation of the equipment.

In addition to the initial orientation, the lab director is responsible for making certain that every new teacher in the department is familiarized with the equipment. During the orientation prior to the opening of school, the administrator should provide several hours for new teachers in the system to work in the language lab. A teacher should not take a class into the lab without first being thoroughly instructed in its use. Failure to familiarize new teachers with the operation may well result in a later refusal to use the lab at all, and can have far-reaching and negative effects on the entire program. Although the lab director has the responsibility of orienting the new person, it is the administrator who can see that time is provided for the orientation.

Provision should also be made so that the new teacher feels free to ask for help any time a problem arises. It is better for the lab director to be called out of his class a couple of times during the first part of the year than to have the lab suffer from teacher abuse and subsequent student abuse.

But what if all the teachers know how to operate the lab, and yet a machine doesn't function? If the console is the type which plugs into an electrical outlet, the plug should be checked. If there is a fuse, it too should be checked. If the electricity appears to be on but the students don't hear anything, the tape should be put on another channel to see if the results are any better. If these very basic procedures do not take care of the problem, the lab director should look in the operating manual for a section entitled "Operational Difficulties," "Troubles and Remedies," or the equivalent. He then should check to see if he can find a description of the problem at hand and follow the suggested remedy in the manual. It is seldom that a lab which is working one hour will not work the next; for the most part, a lab develops its troubles over a long period of time and becomes increasingly more difficult to operate, or more "temperamental." Any teacher who notices such a problem developing should notify the lab director immediately. But above all, if it becomes evident that the lab is not going to be in operating order in a very few minutes, it is better to go back to the classroom and continue the live instruction. The time of the students and of the teacher should not be wasted in a fruitless effort to discover a problem which couldn't



be remedied by the teacher anyway. This is the time to request a professional technician to come and make the necessary repairs.

PREVENTIVE MAINTENANCE

The term *preventive maintenance* refers to certain activities or procedures which result in maintaining the equipment in a constant state of readiness. There are several preventive maintenance procedures which should be adopted to insure the smoothness of the entire operation.

The lab director is indirectly responsible for the behavior of all students while they are in the lab. In other words, although another teacher will be with the students, unless it is the lab director's class, it is up to him as the person in charge of the facility to orient all students to the lab. He should prepare an outline to use for this orientation, and then see that each student is instructed in the use of the facility. Very few students are malicious but most are curious, and if their curiosity is satisfied during orientation, it will solve a great many of the problems caused by the student's "fiddling around."

During the first orientation session, the students should not simply be told what to do; they should do it. They should be encouraged to ask questions, and the questions should be answered honestly. Each student should be told of the expense of the equipment, what he has to lose by abusing it, and, most importantly, what he has to gain by using it. Actually, it is often better not to tell him what he cannot do, but explain to him why he should not do it. He should be shown, for example, that he can stretch apart the earpieces of the headset without damaging it, but that if he twists as he separates them, the bands will break. Student support and cooperation can be earned by making the students feel that the lab director and the other teachers trust them and consider them capable of doing as they are asked. In short, the best policy is to appeal to the student's sense of responsibility. Rules or guidelines should outline the expectations of the teacher, but the student should not be made to feel as if he is attempting to "get away" with something while the teacher is attempting to "catch" him misbehaving.

Actually, very few rules are necessary. For example, the lab director might ask that students not take all their books to the lab if there is no place to put them; that they not have pencils or pens unless the teacher specifically requests them; that they sit in their assigned positions; and that they report any abuse which they notice at their stations. Students react well to this technique. In fact, at times they seem to scrutinize their stations too carefully, and then expect the teacher to see that immediate action is taken to apprehend whoever is responsible for the misuse of a booth. Again, it should be stressed that this attitude will be the result of each and every student feeling the weight of the trust which has been placed in him.

Teachers should expect a normal amount of wear and deterioration on the student positions. The staff staged be interested in having a lab which is used constantly rather than maintained in showplace condition, even though that use manifests itself in an occasional scratch, broken wire, or signature.



One of the major responsibilities of the teacher with respect to preventive maintenance is to keep an accurate and up-to-date record of malfunctions which have occurred during lab use. If, for example, a student position is not receiving a program or if one of the console channels seems to be inoperative, the teacher should make a note of that, being careful to describe the malfunction. Otherwise, the technician may spend a great deal of time checking out equipment which is operating correctly. It is easy to keep track of inoperative equipment by keeping a notebook on the console so that each teacher will have immediate access to it whenever a machine malfunctions. Periodically, the lab director should double check the teachers' notes to determine if the difficulties result from improper operational procedure or if problems do exist. This notebook should be pointed out to the service man, and it should be the first thing he consults upon making a service call.

Another facet of preventive maintenance is custodial in nature. A regular cleaning routine should be established which includes cabinet work, metal parts, headphones, booths, and everything else in the lab that is not maintained daily by the janitorial staff. This periodic cleaning can be made a continual operation by cleaning one or more machines or student positions each day. The lab director should not have to set aside a day to clean everything because, in addition to being a lot of work, it also necessitates closing the lab for the day.

To clean the furniture, any good furniture polish recommended for the particular type of finish is fine. The aerosol-type polishes which do not contain excessive oils and which will dry to a hard wax finish are particularly good. Those polishes which leave a greasy coating should be avoided, since they also retain dirt and show fingerprints easily. One may occasionally find it necessary to use a soap and water solution to remove an ink mark or other foreign matter. If too much wax residue accumulates, use ammonia water or denatured alcohol to clean down to the finish, then reapply a wax coating. Prior to using any of these cleaning agents, however, check to make certain that they will not harm the finish. Put some on the finish in an inconspicuous place and test it there.

For headsets, denatured alcohol is very effective. It is inexpensive and available at most pharmacies. In addition to the cleaning abilities of this liquid, it has very good disinfecting properties. Simply dampen a soft cloth with the alcohol and wipe the bands and muffs of the headset. This should be done frequently, since the headbands and muffs tend to get greasy from hairspray and hairdressing with just a little use. Also, it is desirable to keep a box of tissues handy in case a student finds a headset too dirty to wear without cleaning it first.

It is generally better to leave the cleaning and demagnetization of the tape recorders themselves to the service man. When the teacher begins to notice excessive static when tapes are being played, or when a fine brown powder begins to accumulate in the area of the tape heads, it is time to make a note in the maintenance notebook. This will then be taken care of with a minimum of abuse to the equipment, and a minimum of time to the teacher.



STAFF COMMUNICATIONS

In the maintenance of the language lab, communication between the lab director and the building administrator is very important. Primarily, it is the responsibility of the lab director to keep the administrator informed of any major problems encountered which might concern him, such as the necessity of employing a technician, stocking parts for repair, replacing worn out equipment, scheduling in-service training for new personnel, and the like. The administrator should be able to assume that the facility is operating effectively unless advised to the contrary by the lab director. The lab director should call on the administrator when necessary but should not run to him with problems which could be handled on an individual or departmental basis. This does not, of course, preclude an occasional, informal report as to the effectiveness of the lab, the enthusiasm of the students, etc. In effect, the administrator should be kept informed of the operation while being relieved of as much additional work as possible.

CONCLUSION

Obviously, the prevalent attitude relative to language laboratory maintenance is that it must be a shared responsibility. As has been pointed out, administrator, teacher, and lab director should work cooperatively to establish and maintain an effective program which will result in more effective operation and utilization of the facility. If this is accomplished, the student will realize the benefits for which the lab was designed, and teacher and administrator will have been successful in providing the foreign language student with a valuable tool for developing his communication skills,



APPENDIX A

LAB SCHEDULING PROCEDURES

Step 1:

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
FIRST PERIOD					
SECOND PERIOD					
THIRD PERIOD					
FOURTH PERIOD					
FIFTH PERIOD					
SIXTH PERIOD					

Each period can be divided into the desired number of time modules. Twenty to twenty-five initutes are suggested.

Steps 2 and 3:

Period 1	Period 2	Period 3	Period 4	Period 5	Period 6
Bachman	Bachman	. •	Bachman	Bachman	Bachman
Medley	Medley		Medley	Medley	Medley
Egan	Egan	Egan	Egan		
Erickson-	Erickson-			-Erickson	
	Leroux	Leroux	Leroux	Leroux	Leroux
Withrow		Withrow	Withrow	Withrow	Withrow
Nichels					



Step 4: Note that a two-week cycle is used to equalize time.

SCHEDULE A

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
FIRST PERIOD	Bachman Medley	Egan Nickels	Withrow Bachman	Medley	Nickels Withrow
SECOND PERIOD	Buchman Medley	Egan	Bachman Medley	Egan	Bachman Medley
THIRD PERIOD	Egan Leroux	Withrow Egan	Leroux Withrow	Egan Leroux	Withrow Egan
FOURTH PERIOD	Bachman Medley	Egan Leroux	Withrow Bachman	Medley Egan	Leroux Withrow
FIFTH PERIOD	Bachman Medley	Withrow	Bachman Medley	Leroux Withrow	Bachman Medley
SIXTH PERIOD	Bachman Medley	Leroux . Withrow	Bachman Medley	Leroux Withrow	Bachman Medley

SCHEDULE B

FIRST	Baclıman	Egan	Withrow	Medley	Nickels
PERIOD	Medley	Nickels	Bachman	Egan	Withrow
SECOND	Egan	Bachman	Egan	Bachman	Egan
PERIOD	Leroux	Medley	Leroux	Medley	Leroux
THIRD PERIOD	Leroux	Egan	Withrow	Leroux	Egan
	Withrow	Leroux	Egan	Withrow	Leroux
FOURTH	Bachman	Egan	Withrow	Medley	Leroux
PERIOD	Medley	Leroux	Bachman	Egan	Withrow
FIFTH	Leroux	Bachman	Leroux	Bachman	Leroux
PERIOD	Withrow	Medley	Withrow	Medley	Withrow
SIXTH	Leroux	Bachman	Leroux	Bachman	Leroux
PERIOD	Withrow	Medley	Withrow	Medley	Withrow

APPENDIX B

SAMPLE

FOREIGN LANGUAGE LABORATORY

SERVICE CONTRACT

The	(name of company)	hereby	agrees to service the
foreign langua	ge facilities of	(school district)	located in
Room			of
(name o	of building) during th	e period of time be	ginning
	and		
	, according to the following	· ·	
	gular preventive maintenanc	•	
	ed monthly basis. Each call		it length to perform all
necessary main	ntenance on the laboratory f	acility.	
2. Th	ne(name of c	ompany)	shall provide emer-
gency repair s	ervice within 24 hours of req	juest for same, althou	igh it may not be on the
	te. Such an emergency call		-
	duled call, or shall be billed		
	act, as determined by the		
•	nall be considered to be a	iny malfunction whi	ich renders the facility
ino perative.			
3. Th	ne cost for nine monthly cal	lls (either regularly s	cheduled or emergency)
	endable items used in regula		
on a monthly	basis, following each service	call.	
4			
	nis contract may be cancelle	ed by either party by	giving thirty (30) days
written notice	. .		
5. Ti	ne effective date of this agree	ement shall be	
Signed:			
	(School District Represent	ative)	
	(•	
	(Service company represen	tative)	



BIBLICGP APHY

Grittner, Frank M. Teaching Foreign Languages. New York: Harper & Row. 1969.

One of the best modern foreign language methods texts and the first really new one to come out in the past several years. Contains a very good chapter on the language laboratory and the electronic classroom.

Hayes, Alfred S. Language Laboratory Facilities: Technical Guide for the Selection, Purchase, Use and Maintenance, New York: Oxford Univ. Press, 1968.

A good presentation of the more technical aspects of a language laboratory with suggested ways to approach all phases of laboratory operation. A basic source for those desiring to learn more about language laboratories in general.

Hutchinson, Joseph C. Modern Foreign Languages in High School: The Language Laboratory. (USOE Bulletin No. 23.) Washington, D.C.: U.S. Office of Education, 1961.

This publication contains information on the selection and operation of the lab, with emphasis on the "how to" of the classroom situation. It also lists phrases in French, German, Italian, Russian, and Spanish which can be used in giving students instructions in the lab.

_____ and June O. Criteria for Selecting Types of Foreign Language Laboratory Systems. (MLA/ERIC Focus Report 20.) New York: MLA/ERIC, 1971.

Everything the administrator and the language teacher need to know before they purchase a language laboratory. Describes the types of systems available and factors to be considered in their selection. Discusses also the relation between utilization of the equipment and specific learning objectives in foreign language education.

Hyer, Anna L., ed. Audiovisual Instruction, 11 (Oct 1966), 607-98.

The entire issue of this publication is devoted to the language laboratory. Contains, among other things, articles on maintenance which are of interest to the teacher turned lab director.

Stack, Edward M. The Language Laboratory and Modern Language Teaching. New York: Oxford Univ. Press, 1966.

By far the most comprehensive publication on all phases of language laboratory installation and operation. Should be in the hands of every teacher using or contemplating the use of a language lab. A valuable reference.

_____ The Mechanical Potential of the Language Laboratory. (MLA/ERIC Focus Report 14.) New York: MLA/ERIC, 1970.

Describes eleven basic, mechanical functions of the foreign language laboratory which provide for utilization of authentic target language, linguistically effective learning devices, visuals, and facilities for monitoring and testing. Includes a selected bibliography.

Turner, E. Daymond, Jr. Correlation of Language Class and Language Laboratory. (MLA/ERIC Focus Report 13.) New York: MLA/ERIC, 1969.

A concise report which focuses on correlating work in the foreign language class with drill in the language laboratory. Discusses teacher attitude as a crucial factor, materials, scheduling, and programming.

